

language at line 3 of the claim, as requested by the Examiner, by deleting the term "with" and replacing it with "having." Claim 30 has also been amended to incorporate the limitations of claims 40 and 41. Claim 65 has been similarly amended to incorporate the above-mentioned changes. Moreover, a new abstract has been submitted on a separate sheet, as requested by the Examiner, with minor editorial changes.

Please note that Applicants have also amended the title of the invention, as suggested by the Examiner, which does not exceed the length of 500 characters and is specific to the claimed invention. See 37 C.F.R. § 1.72.

In summary, all amendments made herein are supported by the claims and the specification as originally filed, and no new matter has been added. As required by 37 C.F.R. § 1.121(b)(1)(iii) & (c)(1)(ii), Applicants have provided a marked-up version of the amended claims, title, and abstract in the attached Appendix.

II. Rejection Under 35 U.S.C. § 112, Second Paragraph

The Examiner has rejected claim 30 under 35 U.S.C. 112, second paragraph, because the claim language "at least one silicone polymer with a polysiloxane skeleton" allegedly "does not clearly state if the composition contains at least one silicone polymer along with another polysiloxane skeleton grafted with non-silicone organic monomers or if the at least one silicone polymer has a silicone skeleton grafted with non-silicone organic monomers." Present Office Action at page 2.

Although Applicants disagree that the original claim language is unclear, they have clarified the claim language by deleting "with" and replacing it with "having,"

i.e., "at least one silicone polymer having a polysiloxane skeleton," as suggested by the Examiner, in both claims 30 and 65. Accordingly, Applicants request withdrawal of this rejection.

III. Obviousness-type Double Patenting Rejection

The Examiner has rejected claims 30-32 and 44-67 under the doctrine of obviousness type double patenting over claims 1-19 of U.S. Patent No. 5,637,306 to Cauwet et al. ("Cauwet") in view of U.S. Patent No. 5,417,965 to Janchitraponvej et al. ("Janchitraponvej"). Applicants respectfully traverse this rejection for the reasons set-forth below.

In making a double patenting rejection, the Examiner can only look to the claims of the issued patents to support the assertion of obviousness. Specifically, obviousness-type double patenting rejections must make clear 1) the differences between the inventions defined by the conflicting claims – a claim in the patent compared to a claim in the application; and 2) the reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim in issue is an obvious variation of the invention defined in a claim in the patent. See M.P.E.P. § 804 B 1.

In the present case, Applicants have amended independent claims 30 and 65 to incorporate the limitations of claims 40 and 41, discussed *supra*. In particular, the instant claims specify that the "at least one grafted silicone polymer comprises, on the main silicone chain, at least one organic group of anionic nature obtained by radical (homo) polymerization of at least one anionic unsaturated carboxylic acid

monomer, partially or totally neutralized in the form of a salt," and that the "at least one grafted silicone polymer is chosen from silicone polymers containing at least one unit of formula (I)." See, e.g., amended claim 30.

Accordingly, the amended claims are completely distinct from the Cauwet patent. Further, there has been no indication or showing by the Examiner that the amended claims now at issue are an obvious variation of the claimed invention of Cauwet. Finally, Applicants note that claims 40 and 41, the subject matter of which is now contained in amended claims 30 and 65, were not rejected under the doctrine of obviousness-type double patenting. Thus, Applicants respectfully request that the rejection be withdrawn.

IV. Rejection Under 35 U.S.C. § 102(b)

The Examiner has rejected claims 30-32, 44-50, 52-62, and 64-66 under 35 U.S.C. § 102(b) as being anticipated by WO 94/21224 to Cauwet et al. ("Cauwet") in view of Janchitraponvej. Applicants respectfully traverse this rejection for the reasons set forth below.

As the Examiner is aware, in order to anticipate a claim, a reference must contain all elements of the claim. See *Hybritech v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1379, 231 U.S.P.Q. 81, 90 (Fed. Cir. 1986)(emphasis added). Further, a single source must disclose all of the claimed elements "arranged as in the claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989) (emphasis added). The identical invention must be shown in as complete detail as is contained in the claims. See M.P.E.P § 2131 (emphasis

added). As these requirements are not satisfied in the present case, Cauwet cannot and does not anticipate the presently claimed invention.

As discussed *supra*, Applicants have amended independent claims 30 and 65 to incorporate the limitations of claims 40 and 41, which were not rejected under 35 U.S.C. § 102. In particular, the instant claims specify that the “at least one grafted silicone polymer comprises, on the main silicone chain, at least one organic group of anionic nature obtained by radical (homo) polymerization of at least one anionic unsaturated carboxylic acid monomer, partially or totally neutralized in the form of a salt,” and that the “at least one grafted silicone polymer is chosen from silicone polymers containing at least one unit of formula (I).” See, *e.g.*, amended claim 30.

As admitted by the Examiner, “the general structure of the organomodified polysiloxanes disclosed by [Cauwet] meets the general description in instant claims 30-32.” Present Office at page 5, lines 17-19. Cauwet, however, does not disclose or discuss how its silicone polymers are obtained, and neither does it specify that its silicone polymers must have an organic group of anionic nature. Moreover, there is no mention that the silicones of Cauwet contain at least one unit of the formula (I), as in the presently amended claims.

Accordingly, Applicants respectfully submit that the rejection under 35 U.S.C. § 102(b) is improper and should be withdrawn, since Cauwet does not teach all of the elements of the claimed invention.

V. Rejection under 35 U.S.C. § 103(a)

The Examiner has rejected claims 30-67 under 35 U.S.C. § 103(a) as being unpatentable over WO 93/23009 to Kumar et al. (“Kumar”) in view of

Janchitraponvej, and claims 33-43, 63 and 67 under 35 U.S.C. § 103(a) as being unpatentable over Cauwet in view of Kumar. Applicants respectfully traverse each of these rejections for the following reasons.

To establish a *prima facie* case of obviousness over a combination of references, the Examiner must show, *inter alia*, (1) some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine reference teachings; and (2) a reasonable expectation of success in so combining. See M.P.E.P. § 2143 and *In re Vaeck*, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991) (citing *In re Dow Chemical Co.*, 837 F.2d 469, 473, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988)). "Both the suggestion and the reasonable expectation of success must be found in the prior art reference, not in the applicant's disclosure." *Id.*

Here, the Examiner has failed to establish a *prima facie* case of obviousness because she has not provided (1) any evidence showing a motivation or suggestion to combine the prior art references or (2) any evidence showing a reasonable expectation of success for the proposed combinations. Each rejection is discussed in turn below.

A. Kumar in view of Janchitraponvej

The Examiner admits that Kumar "fails to teach an aqueous dispersion of insoluble particles of at least one cationic polymer of the instant claims." Present Office Action at page 7, lines 19-20. According to the Examiner, however, it would have been obvious to add "the water-insoluble dispersion containing cationic

acrylate/acrylamide polymer conditioning agent of [Janchitraponvej] to the vinyl-silicone polymer containing hair composition of [Kumar], because [Janchitraponvej] suggests that the combination of cationic polymers, polyethyleneimine and acrylate/acrylamide, provides excellent cleansing of hair while still providing high foaming and conditioning of the hair." *Id.* at page 8, lines 11-17. Applicants respectfully disagree.

In Applicants' view, one of ordinary skill in the art would view each of the references as complete, and would therefore have no motivation to combine them. In particular, both Kumar and Janchitraponvej have solved similar problems in the hair care area using very different approaches. For example, Kumar uses a silicone copolymer, while Janchitraponvej uses polyethyleneimines combined with cationic copolymers, conditioning agents, and surfactants. Moreover, as indicated in Janchitraponvej, the inventive concept lies in the combination of ingredients used, in which this combination of ingredients is specifically used for simultaneous shampooing and conditioning. Col. 3, lines 9-19. Kumar, on the other hand, mentions shampooing and conditioning separately. Page 42, lines 27-30; Examples 21 and 22. Thus, there is no "clear and particular" evidence in either reference to combine them, or to modify the Kumar reference as suggested by the Examiner. *In re Dembiczak* 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999) (there must be a "clear and particular" suggestion in the prior art to combine the teachings of cited references as proposed by the Examiner).

Further, the Examiner admits that Janchitraponvej does not teach the specific cationic polymers of claim 51, but concludes that "choosing an appropriate

acrylate/acrylamide cationic polymer in the conditioning composition of [Kumar] with an expectation to provide high foam and cleansing ability would have been obvious to one of ordinary skill in the art because Janchitraponvej teaches that the cleansing ability is imparted by the cationic nature of the polymers." Present Office Action at page 8, lines. 17-20. The Examiner, however, has not identified any substantial evidence of record supporting her very general determination that any cationic polymer can be added to the invention of Kumar, and that there would be a likelihood of success. See *In re Zurko*, 258 F.3d 1379, 1386, 59 U.S.P.Q.2d 1693, 1697 (Fed. Cir. 2001) (unless "substantial evidence" found in the record supports the factual determinations central to the issue of patentability, the rejection is improper and should be withdrawn).

Rather, it appears that the Examiner's attempt at combining the references is based on hindsight reconstruction, using the teachings of the present invention to defeat patentability, which is improper. As held by the Federal Circuit, "it is improper, in determining whether a person of ordinary skill would have been led to [a] combination of references, simply to use that which the inventor taught against its teacher." *In re Sang-Su Lee*, 61 U.S.P.Q.2d 1430, 277 F.3d 1338, 1433 (Fed. Cir. 2002) (citations omitted); see also *In re Dembiczak* 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999) ("Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."). Accordingly, in view of the precedents set-forth by the Federal Circuit in evaluating obviousness rejections, the Examiner

bears a high burden of proving a *prima facie* case when combining references to defeat patentability, and the Examiner has not met that burden in this case. As such, Applicants respectfully request the withdrawal of this rejection.

B. Cauwet in view of Kumar

The Examiner admits that Cauwet fails to teach the specific polysiloxanes of instant claims 33-42, and also lacks the packages of instant claims 63 and 67. See Present Office Action at page 9, lines 6-8. The Examiner, however, relies on Kumar to cure these deficiencies because Applicants recite the teachings of Kumar in the instant specification, and because Kumar "suggests that the silicone polymers grafted with organic monomers provide brilliance, gloss, conditioning of the hair and style retention." *Id.* Applicants respectfully disagree.

Other than in the present specification, there is absolutely no indication from the teachings of Cauwet that the silicone polymers of Kumar, when combined with at least one aqueous dispersion of insoluble particles of at least one cationic polymer, would be useful in a cosmetic or dermatological composition. As discussed *supra*, using the teachings of the present invention to defeat patentability, i.e., hindsight reconstruction, is improper. In fact, in column 1, line 61 to column 4, line 4, Cauwet explicitly discloses which specific polysiloxanes are useful for the invention, none of which are of the presently claimed formula (I). Moreover, the Examiner has not shown any substantial evidence in the applied prior art that indicates that there would be reasonable success of adding to or substituting the specific polysiloxanes of Cauwet with those of Kumar.

Accordingly, for at least these reasons, the Examiner's analysis lacks merit, and thus Applicants respectfully request withdrawal of this rejection.

CONCLUSION

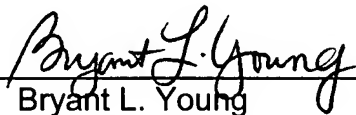
In view of the foregoing amendments and remarks, Applicants submit that this claimed invention is not anticipated or obvious in view of the prior art references cited against this application. Applicants therefore request the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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APPENDIX

**Version with markings to show changes made,
pursuant to 37 C.F.R. § 1.121 (b)(1)(iii) & (c)(1)(ii)**

IN THE TITLE:

The title was amended as follows:

COSMETIC COMPOSITION FOR [THE] TREATMENT OF KERATINOUS MATERIALS COMPRISING [AT LEAST] A GRAFTED SILICONE POLYMER AND [AT LEAST] AN AQUEOUS DISPERSION OF INSOLUBLE PARTICLES OF [NONIONIC OR] A CATIONIC POLYMER

IN THE ABSTRACT:

The Abstract was amended as follows:

The present invention relates to a cosmetic or dermatological composition for the [treatement] treatment of keratinous materials, particularly hair, comprising in a cosmetically [exceptable] acceptable medium at least a grafted silicone polymer with a [polysiloxanic] polysiloxane skeleton grafted by organic non-silicone monomers and at least an aqueous dispersion of insoluble particles of [non ionic and] a cationic polymer. The compositions of the invention are used particularly as rinsed products or as non-rinsed products, particularly for hair washing, hair care, hair conditioning, hair dressing, or hair setting.

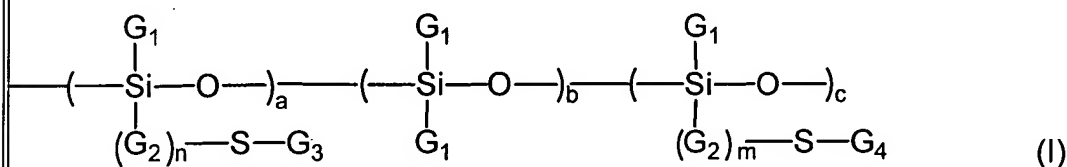
IN THE CLAIMS:

Claims 30 and 65 have been amended as follows:

30. (Amended) A cosmetic or dermatological composition comprising, in a cosmetically or dermatologically acceptable medium, at least one grafted silicone polymer having [with] a polysiloxane skeleton grafted with non-silicone organic

monomers and at least one aqueous dispersion of insoluble particles of at least one cationic polymer,

wherein said at least one grafted silicone polymer comprises, on the main silicone chain, at least one organic group of anionic nature obtained by radical (homo) polymerization of at least one anionic unsaturated carboxylic acid monomer, partially or totally neutralized in the form of a salt, and
wherein said at least one grafted silicone polymer is chosen from silicone polymers containing at least one unit of formula (I):



in which:

- G₁ independently represents hydrogen or a C₁-C₁₀ alkyl radical or a phenyl radical;
- G₂ independently represents a C₁-C₁₀ alkylene group;
- G₃ represents a polymer residue from the (homo)polymerization of at least one anionic monomer containing ethylenic unsaturation;
- G₄ represents a polymer residue from the (homo)polymerization of at least one hydrophobic monomer containing ethylenic unsaturation;
- m and n are equal to 0 or 1;
- a is an integer ranging from 0 to 50;

- b is an integer ranging from 10 to 350; and

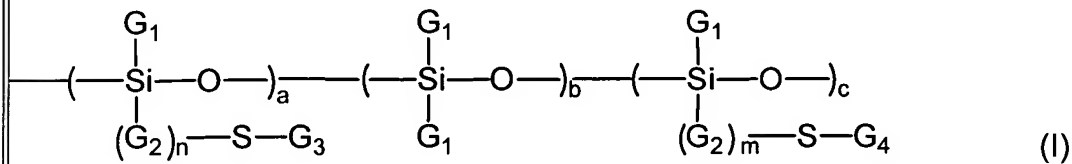
- c is an integer ranging from 0 to 50; wherein either a or c is not 0.

65. (Amended) A non-therapeutic process for treating a keratin substance comprising:

applying to said keratin substance a composition comprising, in a cosmetically or dermatologically acceptable medium, at least one grafted silicone polymer having [with] a polysiloxane skeleton grafted with non-silicone organic monomers and at least one aqueous dispersion of insoluble particles of at least one cationic polymer; optionally rinsing with water,

wherein said at least one grafted silicone polymer comprises, on the main silicone chain, at least one organic group of anionic nature obtained by radical (homo) polymerization of at least one anionic unsaturated carboxylic acid monomer, partially or totally neutralized in the form of a salt, and

wherein said at least one grafted silicone polymer is chosen from silicone polymers containing at least one unit of formula (I):



in which:

- G₁ independently represents hydrogen or a C₁-C₁₀ alkyl radical or

a phenyl radical;

- G₂ independently represents a C₁-C₁₀ alkylene group;
- G₃ represents a polymer residue from the (homo)polymerization of at least one anionic monomer containing ethylenic unsaturation;
- G₄ represents a polymer residue from the (homo)polymerization of at least one hydrophobic monomer containing ethylenic unsaturation;
- m and n are equal to 0 or 1;
- a is an integer ranging from 0 to 50;
- b is an integer ranging from 10 to 350; and
- c is an integer ranging from 0 to 50; wherein either a or c is not 0.